

Summary of the Rejections

The following identifies the authority and/or prior art applied to the identified claims for each rejection of the claims set forth in the Office Action dated June 6, 2001.

1. **Sections 4 and 5:** Claims 53-55 are rejected under 35 U.S.C. Section 101 as directed to non-statutory subject matter.
2. **Sections 6 and 7:** Claims 1-12, 14-44, 53-55 and 74-77 are rejected under 35 U.S.C. Section 103(a) as being unpatentable over Archibald et al. U.S. Patent No. 5,825,883 in view of specified and unspecified prior art.

Applicant traverses the grounds for each and every rejection for at least the reasons set forth herein below.

Applicant's Arguments

Applicant traverses the rejection, in **Section 5**, of claims 53-55 as being directed to non-statutory subject matter. The Office Action states that the claims recite "non-functional descriptive material." However, as Applicant pointed out in the previous response, the claimed invention is directed to "functional descriptive material." The MPEP, at 2106 IV.B.1, entitled: Nonstatutory Subject Matter, states as follows:

...Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of *data structures and computer programs* which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. (emphasis added)

Section 2106 IV.B.1 later adds that "when functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ.2d 1031, 1035 (Fed. Cir. 1994)."

Using the MPEP and *Lowry* as guidance, claims 53-55 represent patentable subject-matter. With regard to the first part of the two-part test summarized above, the recited claim elements,

including "an executable program module including at least one object class from which instantiated objects are rendered," are directed to *functional* descriptive material. Furthermore, the claimed invention, taken as a whole, performs the function of facilitating automated distribution of software to customers. The claimed invention, explicitly reciting "an executable program module" is clearly functional. Applicant, in the event this rejection is not withdrawn, again requests an explanation of why the preamble and recitation of executable software in claims 53-55 does not meet the "functional" requirement for descriptive material.

With regard to the second part of the patentability test, the preamble recites "a memory containing a software module." Such memory, read in light of the last element (i.e., "an executable program module including at least one object class"), meets the second part of the test summarized above – that the claimed functional descriptive material be recorded on some computer-readable medium. Applicant incorporates by reference, and repeats, the reasons set forth in the prior response for maintaining the patentability of the invention recited in claims 53-55. If the "unpatentability-based" rejection of claims 53-55 is not withdrawn, then Applicant respectfully requests a specific explanation of how this two-part test set forth in the MPEP is not met by currently pending claims 53-55.

Applicant furthermore traverses the rejection, in section 7, of claims 1-12, 14-44, 53-55 and 74-77 under 35 U.S.C. Section 103(a) as being unpatentable over Archibald U.S. Patent No. 5,825,883 in view of specified and unspecified prior art. Applicant addresses each of the rejections in the order they arise in the Office Action.

The rejection of claim 1 is based upon construing a number of object-oriented program environment terms, recited in claim 1, in a manner that is inconsistent with well-established meanings for those terms in the art. In particular, the Office Action construes object-oriented program environment terms, such as "object class," "object instances," "instantiated," etc., in a manner that is inconsistent with Applicant's specification and the knowledge of those skilled in the computer software art.

Nowhere does Archibald disclose or suggest measuring usage according to object instances instantiated from a distributed object class as recited in claim 1. As an initial matter, the Office Action, at page 4, explicitly concedes that Archibald does not mention the terms "class" or "object."

Thereafter, the Office Action recites/references a passage, extracted from a reference entitled: "Data abstraction and structures using C++", defining object classes, object instances, etc. While incomplete, the citation of the reference reinforces that claim 1 is clearly directed to an object-oriented program environment. However, rather than concede that Archibald does not suggest the "object-creation-based" accounting of customer usage recited in claim 1, the Office Action, proceeds to apply the terms "object class" and "object instances" to the disclosure of Archibald in a way (i.e., non-object-oriented) that is inconsistent with Applicant's specification and claims, and the cited definition from the "C++" reference.

Applicant's claim 1 recites object-oriented program environment constructs. As suggested by the "C++" reference cited at page 4 of the Office Action, an object class is a template in an object-oriented (e.g., C++) program environment from which object instances are created (instantiated). Applicant's claim 1 specifically recites distributing an object class (template) from which object instances are created (instantiated). As recited in claim 1, charging a customer is based upon usage of the distributed object class as measured by *object instances created from the distributed object class*.

The Office Action, at the bottom of page 4 seeks to identify object classes and instances, as recited in claim 1, in the Archibald reference. The Office Action assigns the object-oriented program environment labels "class" and "instance" to elements in Archibald, even though nothing in Archibald's disclosure suggests that its distribution scheme is based upon such object-oriented program environment constructs. Archibald neither discloses nor suggests that its distribution scheme is indeed performed in an object-oriented environment. Applicant repeats and incorporates by reference the reasons why claim 1 is not rendered unpatentable by Archibald in the prior office action. Thus, in summary, the rejection of claim 1 is improper for at least the reason that Archibald is not directed to an object-oriented program environment, and therefore cannot suggest the recited object instance-based usage measurement scheme, and should be withdrawn.

Applicant, for the reasons set forth hereinabove, likewise traverse the rejection of independent claims 31, 37, 42, and 53 that are also directed to object-oriented program environment constructs that are neither disclosed nor suggested in Archibald. Furthermore, the Office Action's rejections of claims depending from independent claims 1, 31, 37, 42, and 53 as unpatentable over Archibald are likewise traversed for at least the reason that such claims include the elements of

these patentable independent claims. Applicant addresses the Office Action's individual grounds for the rejection of the dependent claims herein below. Applicant reserves the right to further argue that there is no suggestion to combine particular references in the event that a further Office Action identifies additional references that contain elements that are not present in Archibald.

Applicant traverses the rejection of **claim 2** that recites "a customer creates a number of instances from a software module, and use is measured according to instances detected" Archibald does not disclose monitoring the creation of instances (e.g., object instances created from an object class) of an item. Archibald does not even disclose creation of such instances. Instead, the cited portion of Archibald, at col. 6, lines 48-60, merely discloses a meter module generating use information (*i.e., length of use*). The reference to "*i.e., length of use*" at line 55, not as an example, but rather as "in other words," does not suggest a use-based charging scheme based upon the instances detected. It is further iterated that Archibald does not suggest usage based upon object-oriented "instances" created from the claimed object class.

Applicant traverses the rejection of **claim 3**. Archibald discloses that usage information is determined. It does not disclose how that information is obtained. Nowhere does Archibald disclose instances created from a software module that are "periodically *accessed* to determine use." If the rejection is not withdrawn, Applicant respectfully requests identification of where Archibald, at col. 12, lines 33-42, teaches periodically *accessing the instances* to determine their use.

With regard to the rejection of **claim 4** and **claim 36**, Applicant does not challenge that charging a daily rate for use of software is not known. Rather, applicant traverses the rejection of claims 4 and 36 for at least the reason that the prior art does not disclose or suggest the object instance-based daily monitoring/charging recited in claim 4.

With regard to the rejection of **claim 5**, Applicant agrees that Archibald contemplates a "trial use." However, Archibald does not disclose that the "trial use" option is associated with the recited "demonstration mode" of an object instance. In other words, the object instance has a particular mode of operation that is associated with a demonstration state for the object instance.

Applicant traverses the rejection of **claim 6**. Claim 6 recites "a single agreement governing use of instances" created from software modules. However, Archibald discloses a license that appears to apply to each downloaded copy of digital content rather than instances that are created from the downloaded digital content. Furthermore, the Office Action appears to be misconstruing

the phrase "governing use of instances created from the set of software modules" in seeking to apply the disclosure of col. 7, lines 40-67 to the claimed invention.

Applicant traverses the rejection of claim 7 for at least the reason that Archibald does not disclose "instances *derived from a software-module.*" Furthermore, Archibald teaches termination when an amount (rent to own price) is reached rather than a termination date.

Applicant traverses the rejection of claims 8, 26 and 41 including the assertions that the recited elements are both well known in the art and that incorporation of such elements into Archibald is suggested by the prior art. Applicant is unaware of the recited warning/reordering reminder in response to detecting an upcoming expiration date, issuing a re-order reminder or informing a user of a need to reorder credits. In the event that this rejection is not withdrawn,, Applicant requests provision of a reference showing such a teaching in the prior art. At such time Applicant will assess whether such reference, taken in combination with the teachings of Archibald, renders claims 8, 26 and 41 obvious.

Applicant traverses the rejection of claims 11, 12 and 74 for at least the reason provided herein above with regard to claim 1. Claims 12 and 74 identify a specific base for measuring use (i.e., execution of an object instance).

Applicant respectfully submits that, with regard to the rejection of claims 14 and 15 Archibald does not even disclose downloading an object class from which the specified objects are created/instantiated. Applicant specifically traverses the Office Action's assertion that "object classes" are disclosed or suggested by Archibald.

Applicant traverses the rejection of claim 16 in view of the previous amendment to the claim indicating that the monitored duration is that of an object instantiated from the software module. Archibald does not disclose such object instances.

Applicant traverses the rejection of claim 17. Claim 17 is directed to a particular monitoring implementation that comprises "registering execution of an instance that tracks throughput of a process" and this indirectly measures value created by a process that uses the software modules. Applicant respectfully submits that nothing in column 5, line 65 to col. 6, line 12 even remotely discloses tracking process throughput or the particular method step recited in claim 17. The Office Action's further explanation does not address the "throughput of a process" element of claim 17.

Applicant traverses the rejection of **claim 23**. The claim element recites "identifying the location of an instance created from a software module" obtained by a customer. Applicant respectfully submits that Archibald, col. 10, lines 1-13 does not disclose any location of software obtained by a customer. The subsequent explanation by the current Office Action does not provide any further insight as to how Archibald discloses the recited elements of claim 23 pertaining to identifying a location of a software module.

Applicant traverses the rejection of **claim 24**. Claim 24 is directed to a failure by a license manager (maintained at a customer's site) to communicate usage of software to a software brokerage. The failure is reported to a central licensing facility. In contrast, Archibald discloses a failure by an authority (e.g., a software brokerage) to properly communicate to a customer site. Archibald's failure is a communication failure in the opposite direction of the element recited in claim 24.

Applicant traverses the rejection of **claims 27-28**. Archibald col. 2, lines 37-44 does not disclose or even remotely imply that the downloaded software relates to industrial manufacturing (automation/information) software. If anything, Archibald suggests that the downloaded digital content comprises individual consumer items such as articles, music, books, individual consumer software, etc. – not the type of software utilized to run industrial processes and record data from such processes.

Applicant traverses the rejection of **claim 29**. Archibald, as mentioned previously herein above, does not even disclose use of instances created from software modules.

Applicant traverses the rejection of **claim 30**. In particular, though configuration tools were indeed well-known at the time of the invention, Applicant respectfully submits that the prior art does not suggest providing such tools to customize instances created from software modules in a method that includes charging a customer based upon monitored use of software modules. The cited reference and explanation of configuring a software program does not meet the claim limitations directed to customizing object instances. In the event that this rejection is not withdrawn, Applicant requests provision of a reference showing such a teaching in the prior art. At such time Applicant will assess whether such reference, taken in combination with the teachings of Archibald, renders claim 30 obvious.

Applicant traverses the rejection of claims 32 and 33. Archibald, as mentioned previously herein above, does not even disclose creating or executing object instances created from a software module, and therefore cannot disclose basing usage of the software modules on executing/creating such instances (e.g., instantiated objects) as recited in the claims.

Applicant traverses the rejection of claim 34. Claim 34 recites "registering use of the software module" to measure throughput of an industrial (e.g., manufacturing) process. Such element facilitates monitoring throughput of an industrial process (e.g., an assembly line, a batch process) to indirectly measure value created by the process using the software modules. Applicant respectfully submits that nothing in Archibald column 5, line 65 to col. 6, line 12 even remotely discloses tracking process throughput or the particular method step recited in claim 17.

Applicant traverses the rejection of claim 38. Archibald, at col. 6, lines 33-47, merely discloses use identification information (in the meter data file), but does not suggest that this file is used to enable operation of executable software nor that it is transmitted during an authorization step. Applicant further traverses the assertion that the col. 11 - col. 12 of Archibald discloses the recited transmitting a license file enabling use of the software.

Applicant traverses the rejection of claim 40. Archibald col. 2, lines 38-44 does not disclose or even remotely imply that the downloaded software is industrial automation software.

Turning to the rejection of claims 53-55, Applicant submits that the presently claimed invention comprises a defined article of manufacture wherein particular information is logically bundled within a single module that facilitates efficient and accurate marketing, distribution, and accounting of use by customers of software modules. Applicant traverses the rejection of claim 53 for at least the reason that Archibald does not disclose a single module containing the recited object class.

Applicant traverses the rejection of claims 75-77 for at least the reasons stated above with reference to claims 32-34.


CONCLUSION

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application and all the pending claims to issue.

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If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,


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Date: March 28, 2003

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this RESPONSE TO OFFICE ACTION (along with any documents referred to as attached or enclosed) is being transmitted by facsimile to the United States Patent and Trademark Office, Attention: Examiner Nga B. Nguyen, Art Unit 3628, Facsimile Number (703) 305-7687, on the date indicated.

Date: March 28, 2003

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